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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,309	05/30/2001	Hiroyuki Yamada	MAT-8140US	1614

7590 03/02/2005

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EXAMINER

EASTHOM, KARL D

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Alc

<b>Office Action Summary</b>	<b>Application No.</b> 09/871,309	<b>Applicant(s)</b> YAMADA ET AL.	
	<b>Examiner</b> Karl D. Easthom	<b>Art Unit</b> 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-6 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6 and 9-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5, 9-11, 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by admitted prior art Fig. 2. Fig. 2 discloses the claimed invention at applicant's Fig. 2, where it is a chip resistor, with width depicted shorter than its length, with the S section between outermost slits 4, trimming sections the outermost sections 4, and as applicant admits at the top of page 7 of his remarks, laser cuts into the substrate inherently caused by the cuts so that that portion is lower. The space at Fig. 2 is defined by only the S portion without the three middle cuts 4, and includes the side sections having the cuts 4 at the ends. Thus, the cuts 4 at the end are lower at the trimming portions, since the S portion and space does not include cuts. For claims 2, 5 and 11, the width is less as claimed and seen. For claim 12, two side sections have grooves. For claims 13-14, the S shaped section is free of trimming grooves, as the cuts 4 are not in the S portion but define the S portion.

3. Claims 1-2, 5-6, and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Oberholzer. Oberholzer discloses the claimed invention at Fig. 4, with the single S section on either sides of the gaps 41, 42, ending before the cut 51, and with side sections a thin section adjacent each electrode 16. Similar to the remarks above, only the S section defines space, where the cuts 41, 42 are not part of the S section. Then the cut 46 or trimming portion at the side section is the lower part of the substrate. As an alternative, the S section ends before the cut 41 and starts on the right hand side of the cut 46, with a thin side section between the top of the S

and the electrode 16. The cut 41 is not in the S part and meets the claim since as applicant admits, cutting creates cuts in the substrate making that part lower. The substrate 14 has a shorter length than a width. The S section is free of trimming sections because the cuts 41 and 42 delineate the S shape, and are not cut into the portion that forms the S shape. The gaps 41, 42 are similar to applicants gap 17. In claims 2 and 5, the part 13 is wider than the S portion. In claim 3, the cut 46 is in the side section. Claims 6, 8 and 9-10 have like elements to those noted. For claim 6, col. 1, lines 5-17 discloses thick film circuits, and there is only one way to make such a circuit, by printing. (For evidence, see Handbook of Thick Film Technology (1976)(thick films are made by screen printing)(Ch. 1, page 1). For claim 11, a side section can be defined as a section adjacent the electrodes without having an edge to define same, with middle portions integrally attached to same. For an alternative to that interpretation, see below.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 5-6, and 9-14 are rejected under 35 U.S.C. 102(b) as anticipated by Kiyobumi (JP 09-205004, see machine translation) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kiyobumi (JP 09-205004). Kiyobumi discloses the claimed invention at Fig. 3, with the S section printed and having a trimming section 34. The side sections are connected along a substantial portion of length of the electrodes 32 where the term is one of degree and substantial portion of length could be any portion. (The S appears backwards but is an S shape or one can flip the chip to render the shape an S ). The cut at 34 makes the trimming portion

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lower for reasons noted above, meeting claims 1, 6 and 11. Or, Fig. 2 meets the claim where the cuts 24 are not part of the S shape for reasons noted above, similar to Fig. 2 of admitted prior art. Then the side sections meets claims 1-2, 5, and 9-11. For claim 6, printing is at pars. 9-13. As a 103 alternative, where Fig. 2 discloses a substantial length of side sections along the electrode, and where the thicker ends simply provide a smaller resistance, so that it would have been obvious to employ thicker ends to have a resistance closer to a square resistor, see par. 8-12. Or, as another 103 alternative, it would have been obvious to print all sections of Fig. 2 without trimming in the S portion, and trim only on the end portions where Fig. 3 discloses a combination of the methods of trimming only on the end portion of the resistors and printing other portions, see also pars. 9-14 (meeting claims 12-14). Applicant admits, as noted above, that the cuts also cut the substrate as is well known, and such cuts would have been obvious if argued not to be inherent, since the full cuts through the substrate ensure that the resistor is cut.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art Fig. 2 or Kiyobumi (JP 09-205004, see machine translation). APA and Kioybumi Fig. 2 admits of the claimed invention, as discussed in the specification, and as noted above, except twice the thickness. The S shaped section has varying thicknesses, and it would have been obvious to render one of those so that the side sections is twice that width where the side section appears roughly or virtually twice that at certain sections because, width and length are related to resistance so that varying the position of the cuts 4 to be a little different in order to change the resistance would have been obvious where the whole purpose of trimming is to vary the resistance a little.

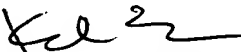
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7. Applicant's arguments filed 1/31/05 have been fully considered but they are moot or not persuasive.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Easthom whose telephone number is (571) 272-1989. The examiner can normally be reached on M-Th, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Karl D Easthom  
Primary Examiner  
Art Unit 2832

KDE